

timely filed in view of the enclosed Petition for a two-month extension of time which extends the time for response up to and including June 29, 2003.

This Amendment is filed in the revised format described in the Office's Pre-OG Notice dated 31 January 2003.

Please amend the application as follows.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this Amendment.

Remarks begin on page 8 of this Amendment.

Amendments to the Claims

Please amend the claims to read as follows:

1. (Currently Amended) A method of making a polymer composite building material, comprising: (a) providing a reinforcement precursor including commingled, continuous filaments of glass fibers and polymeric fibers; (b) consolidating said commingled continuous filaments of glass fibers substantially oriented in at least a first direction and polymeric fibers, such that said polymeric fibers become a matrix which is reinforced by said glass fibers, and (c) disposing a capstock polymeric layer substantially over said consolidated glass fibers and matrix; said capstock polymeric layer being resistant to heat deformation and corrosion.

2. (Currently Amended) The method of claim 1, wherein the consolidation of the commingled fibers is conducted in-situ during in-line extrusion or pultrusion of the final end product.

3. (Currently Amended) The method of claim 1, wherein the consolidation of commingled fibers produces a tape or rod. 4. (Currently Amended) The method of claim 1, wherein said disposing step (c) comprises extrusion.

5. (Currently Amended) The method of claim 1, wherein said consolidating step (b) comprises: extrusion, pultrusion, or both.

6. (Currently Amended) The method of claim 1, wherein the commingled, continuous filaments of glass fibers and polymeric fibers include from about 40% - 80% glass fiber content.

7. (Currently Amended) The method of claim 1, wherein the commingled, continuous filaments of glass fibers and polymeric fibers further include carbon fibers, aramid fibers, or both.

8. (Currently Amended) The method of claim 1, wherein said reinforcement precursor includes a bulk molding compound made of the commingled, continuous filaments of glass fibers and polymeric fibers.

9. (Currently Amended) The method of claim 8, wherein said consolidating step (b) comprises compression molding said bulk molding compound into a building product.

10. (Currently Amended) The method of claim 9, wherein the building product is selected from the group comprising: fence, rail, post or deck materials.

11. (Currently Amended) The method of claim 5, further comprising helically winding said glass fibers, said polymeric fibers or both.

12. (Currently Amended) The method of claim 8, wherein the bulk molding compound is diluted with an addition of polymeric pellets to a glass fiber content of 10% or greater in the final product.

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13. (Currently Amended) The method of claim 1, wherein said building product has controlled thermal expansion and contraction.

14. (New) A polymer composite building material comprising:
a composite reinforcement comprising continuous filaments of fibers substantially oriented in at least a first direction within polymeric matrix; and
a capstock polymeric material disposed substantially over said composite reinforcement;
said building material being resistant to heat deformation and corrosion.

15. (New) The building material of claim 14 wherein at least said capstock has a dark color.

16. (New) The building material of claim 15 wherein said heat deformation resistance includes resistance to bowing due to expansion and contraction of said building material when exposed to sunlight.

17. (New) The building material of claim 16 wherein said composite reinforcement and said capstock are observably discrete portions of said building material.

18. (New) The building material of claim 14, wherein said composite reinforcement comprises about 20 wt.% fiber content.

19. (New) The building material of claim 18 wherein said fibers comprise one or more of: glass, aramid or carbon fibers.

20. (New) The building material of claim 14 wherein said resistance to corrosion includes resistance to chemical gasses or acids.

21. (New) The building material of claim 14 in which the building material is in the form of a fence, rail, post, or decking component.

Al 22. (New) The building material of claim 14 wherein said fibers are further oriented in a second direction.

23. (New) A polymer composite fencing component comprising:

a composite reinforcement comprising continuous filaments of high strength fibers oriented substantially in at least a first longitudinal direction within a polymeric matrix;
and

a capstock polymeric material disposed substantially over said composite reinforcement;

said fencing component being resistant to corrosion and heat deformation due to exposure to sunlight.

24. (New) The fencing component of claim 23 wherein said composite reinforcement comprises one or more of: roving, fabric or tape.

25. (New) The fencing component of claim 24 wherein said fabric comprises a uni-directional, multi-axial or woven material.

26. (New) The fencing component of claim 23 wherein said composite reinforcement comprises a pultrusion.

27. (New) The fencing component of claim 23 wherein said polymeric matrix comprises a thermoplastic resin.

28. (New) The fencing component of claim 23 wherein said component has a dark color and a span of at least about 8 feet.

29. (New) A method of making a polymer composite building material comprising:

forming a composite reinforcement comprising continuous filaments of fibers oriented substantially in at least a first direction within a polymeric matrix; and

disposing a capstock polymeric material substantially over said composite reinforcement.

30. (New) The method of claim 29 wherein said forming step comprises a pultrusion step.

31. (New) The method of claim 30 wherein said pultrusion step comprises pultruding a commingled roving.

32. (New) The method of claim 31 wherein said commingled roving comprises said continuous filaments of fibers and a fibrous precursor of said polymeric matrix.

33. (New) The method of claim 32 wherein said continuous filaments of fibers comprise glass fibers and said fibrous precursor of said polymeric matrix comprises thermoplastic fibers.

34. (New) The method of claim 29 wherein said disposing step comprises extruding said capstock polymer over said composite reinforcement.

35. (New) The method of claim 29 wherein said forming step comprises pultruding said continuous filaments of fibers and a precursor of said polymeric matrix, and said disposing step comprises extruding said capstock polymeric material over said pultruded composite reinforcement.

36. (New) The method of claim 35 wherein said pultrusion and extrusion steps are conducted in-line.

37. (New) The method of claim 29 wherein said fibers are further oriented in a second direction.

38. (New) A polymer composite building material comprising:

a composite reinforcement comprising continuous glass filaments of fibers substantially oriented in at least a first direction within a thermoplastic polymeric matrix, said composite reinforcement having a higher tensile strength than aluminum; and

a capstock polymeric material having a dark color disposed substantially over said composite reinforcement;

said building material being corrosion resistant to chemical gasses or acids and resistant to bowing due to expansion and contraction of said building material upon exposure to sunlight.

39. (New) The building material of claim 38 wherein said fibers are oriented in substantially only said first direction.

40. (New) The building material of claim 38 wherein said capstock is dark in color.